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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,026	09/29/2005	Cecile Dufour	FR 030035	8268

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EXAMINER	
CHEN, WENPENG	

ART UNIT	PAPER NUMBER
2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/551,026	DUFOUR ET AL.	
	Examiner	Art Unit	
	Wenpeng Chen	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The abstract is objected.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is objected because the legal phraseology "said" is used in the abstract.

Claim Rejections - 35 USC § 101

3. Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. Although Claims 1-3 and 6 refer to method in their respective preamble, the body of claims indicated by the transitional phrase "characterized in that" contains no steps, only description of syntax. Because syntax is not falling within one of the four statutory categories of invention, Claims 1-3 and 6 are rejected under 35 U.S.C. 101.

b. Although Claims 4 and 7 refer to device in their respective preamble, the bodies of claims comprise no components or means. They only require that "said encoding device being provided for carrying out the encoding method according to claims 1 and 6, respectively. As discussed above, Claim 1 and 2 only comprise a limitation to specify syntax. Because syntax is not falling within one of the four statutory categories of invention, again Claims 4 and 7 are rejected under 35 U.S.C. 101.

c. Claims 1-3 and 6 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. The Federal Circuit[1], relying upon Supreme Court precedent[2], has indicated that a statutory "process" under 35 U.S.C. 101 must (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. This is referred to as the "machine or transformation test", whereby the recitation of a particular machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility (See Benson, 409 U.S. at 71-72), and the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity (See Flook, 437 U.S. at 590").

Even we consider Claims 1-3 and 6 to be method claims, the claim(s) neither transform an article nor are positively tied to a particular machine that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. (1. In re Bilski, 88 USPQ2d 1385 (Fed. Cir. 2008). 2. Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).)

Claims 1-3 and 6 do not require absolutely a machine to perform any recited steps. They fail the machine test. Furthermore, the claims as recited do not provide external depiction of the

transformed data. They also fail the transformation test. Therefore, they are directed to non-statutory subject matter in light of Bilski.

d. Claim 5 is rejected because it claims "a transmittable video signal". A signal is not falling within one of the four statutory categories of invention.

Claim Rejections - 35 USC § 112

4. Claims 1-4 and 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for the following reasons.

The bodies of Claims 1-3 and 6 indicated by the transitional phrase "characterized in that" contain no steps, only description of syntax. Because a method is defined by steps and Claims 1-3 and 6 contain no steps. The scopes of Claims 1-3 and 6 are indefinite.

The bodies of Claims 4 and 7 only require that "said encoding device being provided for carrying out the encoding method according to Claims 1 and 6, respectively. Because the scopes of Claims 1 and 6 are indefinite, the scopes of Claims 4 and 7 are also indefinite.

5. Claims 1-4 and 6-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In the present specification, especially in the section of "DETAILED DESCRIPTION OF THE INVENTION", the Applicants only discussed "additional syntactic element", called for

instance "channel temporal prediction". None of a method comprising steps or a device comprising components or means has been described. For considering Claims 1-3 and 6 to be method claims and considering Claims 4 and 7 to be device claims, there are no support for adequate description for the claimed methods and devices.

Claim Rejections - 35 USC § 102

6. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Shen et al. (US 6,043,846).

Shen teaches the following claims as discussed below.

1. An encoding method applied to an input video sequence corresponding to successive scenes subdivided into successive video object planes (VOPs) and generating, for coding all the video objects of said scenes, a coded bitstream constituted of encoded video data in which each data item is described by means of a bitstream syntax allowing to recognize and decode all the elements of the content of said bitstream, said content being described in terms of separate channels (column 1, lines 15-3141, column 2, lines 22-63; column 3, lines 35-50; A MPEG-4 codes each luminance and chrominance channels separately. All the above listed features are the properties of MPEG-4.), said method being further characterized in that

-- said syntax comprises an additional syntactic information (column 2, lines 22-63; The header bits, such as COD, MODB, MBTYPE include these four prediction modes into the syntax.) provided for describing independently, at the image level, in said coded generated bitstream, the type of temporal prediction of the various channels, said predictions being chosen

within a list (Please note that the recited "chosen" word can be treated as an alternative limitation.) that comprises the following situations:

- the temporal prediction is formed by directly applying the motion field sent by the encoder on one or more reference pictures; (column 4, line 12-26, 47-60; forward or background mode)

- the temporal prediction is a copy of a reference image; (column 4, line 12-26, 47-60; One of merged mode from MR with a coding block pattern cbp=0 which means no coefficient is coded. For this case, if a MB is set to "merged mode", the MB can be skipped. The data is just copied from a reference image.)

- the temporal prediction is formed by the temporal interpolation of the motion field; (column 4, line 12-26, 47-60 ; One of merged mode from MR with a coding block pattern cbp not equal to 0. The MB is not skipped. The MR is interpolated as following. The moving part of MR is taken from Ps and has a motion vector associated with Ps. The unmoving part of MR is taken from Pe and has a no motion. Both the image and motion field are interpolated.)

- the temporal prediction is formed by the temporal interpolation of the current motion field and further refined by the motion field sent by the encoder. (column 3, lines 36-45, column 4, line 12-26, 47-60; Interpolated prediction mode in which bi-directional (actually more than one direction) predicted VOP is used.)

2. An encoding method according to claim 1, characterized in that said additional syntactic information consists of a syntactic element whose meaning is specific for each present channel. (column 4, line 47-60; The VLC codes are specified for each channel.)

3. An encoding method according to claim 1, characterized in that said additional syntactic information is a syntactic element whose meaning is shared by all existing channels. (column 4, line 47-60; The VLC codes are used for all existing channels.)

4. An encoding device processing an input video sequence that corresponds to successive scenes subdivided into successive video object planes (VOPs) and generating, for coding all the video objects of said scenes, a coded bitstream constituted of encoded video data in which each data item is described by means of a bitstream syntax allowing to recognize and decode all the elements of the content of said bitstream, said content being described in terms of separate channels, said encoding device being provided for carrying out the encoding method according to claim 1. (column 1, lines 8-13, column 2, lines 40-44, column 4, line 60 to column 5, line 11, claim 36; An apparatus is cited for the corresponding method. Accordingly, an encoding device for carrying out the encoding method according to claim 1 is also taught.)

5. A transmittable video signal consisting of a coded bitstream generated by an encoding device processing an input video sequence that corresponds to successive scenes subdivided into successive video object planes (VOPs) and generating, for coding all the video objects of said scenes, a coded bitstream constituted of encoded video data in which each data item is described by means of a bitstream syntax allowing to recognize and decode all the elements of the content of said bitstream, said content being described in terms of separate channels, said transmittable video signal moreover including an additional syntactic information provided for describing independently, at the image level, in said coded generated bitstream, the type of temporal prediction of the various channels, said predictions being chosen within a list that comprises the following situations: the temporal prediction is formed by directly applying the motion field sent

by the encoder on one or more reference pictures the temporal prediction is a copy of a reference image the temporal prediction is formed by the temporal interpolation of the motion field; the temporal prediction is formed by the temporal interpolation of the current motion field and further refined by the motion field sent by the encoder. (claim 36; As discussed above, an apparatus is cited for carrying out the method of Claim 1. Coded data are transmitted to a decoder.)

6. A method for decoding a transmittable video signal consisting of a coded bitstream generated by an encoding device processing an input video sequence that corresponds to successive scenes subdivided into successive video object planes (VOPs) and generating, for coding all the video objects of said scenes, a coded bitstream constituted of encoded video data in which each data item is described by means of a bitstream syntax allowing to recognize and decode all the elements of the content of said bitstream, said content being described in terms of separate channels, said transmittable video signal including an additional syntactic information provided for describing independently, at the image level, in said coded generated bitstream, the type of temporal prediction of the various channels, said predictions being chosen within a list comprising the following situations: the temporal prediction is formed by directly applying the motion field sent by the encoder on one or more reference pictures the temporal prediction is a copy of a reference image the temporal prediction is formed by the temporal interpolation of the motion field; the temporal prediction is formed by the temporal interpolation of the current motion field and further refined by the motion field sent by the encoder. (claims 17-19, 22-25, 27-29)

7. A decoding device for carrying out a decoding method according to claim 6. (column 1, lines 8-13, column 2, lines 40-44, column 4, line 60 to column 5, line 11, claim 36; An apparatus is cited for carrying out the method of claim 6. Accordingly, an encoding device for carrying out the encoding method according to claim 6 is also taught.)

Conclusion

7. The prior art made of record in form PTO-892 and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

/Wenpeng Chen/
Primary Examiner, Art Unit 2624

June 25, 2010